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BULLETIN

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## EDITORIAL

The Nepal Geological Society is pleased to bring this<sup>4</sup> number of its News Bulletin. The number contains articles and information related to the Society, since the publication of the last issue.

The Society is growing in strength with time. The number of 'Life Members' has been increasing, and this reflects further strengthening of the Society. This issue also contains an updated list of all the Society members.

The General Meeting of the Society was held in September, 1985. Most members present in the Kathmandu valley attended the Meeting and discussed achievements and problems of the Society. Decisions arrived at the General Meeting have been taken up for implementation.

During the last year, the Society arranged training programme for some of its members in India, thus enabling them to increase their professional skills, which in turn, the Society believes, will enable the members to make substantial contribution in the development activities of Nepal. Its relation with the other international geological organizations has been expanding which will, no doubt, help to increase exchange of ideas in future. The Society feels delighted on its achievements, and expects more and more contributions from its members and well wishers, the Society wishes a happy and prosperous New Year to all its members and well wishers.



## NGS News

1. The Nepal Geological Society organized a picnic at Godavari on June 8, 1985 which provided open and broad atmosphere to the members to have an opportunity to get together, exchange different opinions, ideas, share the varied experiences and memories of the past and get entertained. It was a matter of great pleasure that the members participated in the picnic heavily showing their interest in the affairs of the society. Many members participated in the picnic along with their spouses and children which gave them an opportunity to get acquainted with each other and with the society members.
2. The Nepal Geological Society had made an arrangement for participation in a training programme to one of its member Mr. R. R. Sharma, organized by Wadia Institute of Himalayan Geology and sponsored by UNESCO in Dehra Dun, India.
3. Again, the Nepal Geological Society has nominated Mr. R. B. Bajracharya member in a training course on Exploration Geophysics to be organized by the National Geophysical Research Institute in Hyderabad, India.
4. The annual general meeting of the society was held at the auditorium of the Department of Mines & Geology on Sept. 15, 1985. Most of the society members present in the Kathmandu participated actively in the meeting. After the presentation of annual reports by the secretary and treasurer a lively discussion followed in which almost all member expressed their opinions, made suggestion and put forward different proposals related to promoting the activities of the society. Several resolutions were passed with a good accord by its member setting guidelines to the executive committee about the policy to be followed and further assignments to be carried out. The details are given in this issue.
5. As Mr. U. B. Pradhananga, member, Executive Committee had left Nepal for further study, with the full accord of the general body Mr. J. L. Shrestha was nominated in the vacant seat to smoothly carry out the various task of the Society.



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# International Decade of Hazard Reduction

— Dr. Frank Press\*

On the occasion of this Eighth World Conference on Earthquake Engineering, sponsored by the Earthquake Engineering Research Institute, I made a proposal to establish an International Decade of Hazard Reduction (IDHR). By way of background, I reminded them that natural hazards know no national boundaries except the earth itself, and that there is already a history of cooperation in earthquake engineering between nations. Cooperation between scientists and engineers is international by long tradition. To counter some dangerous trends in competition between nations, worldwide cooperation on behalf of people everywhere would be an important symbol.

An IDHR would exploit many of the scientific and engineering advances of recent years. Research on natural hazards is moving to a new era characterized by the critical advances, large-scale field experiments, responsive experimental testing facilities, use of supercomputers, access to

global monitoring and communication facilities. At the same time hazards research in many countries is funded below the level that is really needed to fully utilize these new opportunities.

In view of these observations, I believe that there is great need, and much support can be found, to establish an International Decade of Hazard Reduction. This special initiative would see all nations joining forces to reduce the consequences of natural hazards. The planning could start within a year or two, with the preparation of national plans. The implementation could take place in a few years. Perhaps it would be appropriate for the final decade of this century. What better way to start the new millennium than a world better organized to reduce suffering.

What would be some of the features of IDHR? Earthquake and wind hazards would be a major element of such program. These fields are positioned

\*President, National Academy of Sciences and National Research Council.



for making rapid advances, given the impetus of a dedicated, coordinated, international effort. For example, an international supercomputer facility dedicated to natural hazard research might be established. Machines with billions of floating point operations per second would be available by that time. With this level of computing power, one can think of expert systems for the design of structures using realistic non-linear models. One can envisage international teams undertaking the regionalization of risk. Many parts of the world that are particularly prone to wind or earthquake have not had the advantages of a risk assessment for their region.

National goals for participation in the international decade could be a major spur to country action. Think of what the International Geophysical Year some 25 years ago did for the field of geophysics in this country and other countries. As a significant bonus, an international program can improve the infrastructure for hazard mitigation in the developing countries where the problems are so severe, the dangers are so great, and the ability to respond is so poor. Experimental facilities that require high capital outlays and that contribute so much to our understanding of how to design and build buildings can be done on an international basis, perhaps

using the CERN models developed for particle physics. Costs would be shared and access would be provided to all countries.

The world is more vulnerable to cataclysms today than ever before because of the growing population, the concentration of population, the fragility of lifelines and the interdependence of people. Our knowledge of the effects of great cataclysms is growing. For example, there is growing concern about a new source of danger — resurgent calderas. These are huge volcanic collapse features which combine the destructiveness of earthquakes as well as huge volcanic eruptions. Imagine events that are 1000 times more powerful than the eruption of Mt. St. Helens, which itself caused damage of over a billion and a half dollars. Some resurgent calderas are showing renewed activity in the form of surface doming, earthquake swarms and evidence of magma accumulating a few kilometers beneath the surface. The geologic record tells us that the occurrence rate might be about ten per million years. The destructiveness of some resurgent calderas can be measured in millions of square miles of agricultural land wiped out by the ash deposits, the lifting of fine ash and the sulfur products into high atmosphere, blotting out the sun for perhaps weeks at a time, produ-

cing worldwide agricultural losses? An IDHR would include studies of resurgent calderas, earthquakes, cometary impacts, storms, and other destructive natural phenomena.

Some concluding thoughts. By any measure, civilization has made much progress in this millenium. I think the world is better off today than it was 100 years ago, certainly better off than it was 500 years ago. If you have any doubts, as some do, think in terms of life expectancies and how they have improved, of the enormous reduction of famines and epidemics, and the remarkable economic progress. Science and technology has been the major factor responsible for the improved state of humankind. Yet much remains to be done. We are haunted by the specter of natural hazards, with immense consequences because of concentrated populations, frailty of modern social institutions, and the other

factors that I have mentioned. Can we minimize their destructiveness? Most of you will agree with me that we will have the technical means to do so in the years ahead.

Indeed, humankind has the technical means to achieve great things this next millenium: We can provide an adequate food supply, conquer disease once and for all, provide global education, extend economic progress, and greatly reduce the risk of natural hazards. Most important we can eliminate war so that the worst hazard of all - nuclear war - is no longer a threat. I believe we can and must progress in this manner. Perhaps this is our last opportunity to do so. I believe that the involvement of dedicated scientists and engineers, such as those in your Association, is the key to achieving these essential global goals.

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फोन ५-२२२०२

# The Seismic Refraction Method in Hydroelectric Projects in Nepal

— R. B. Bajracharya\*

Since 1925, the seismic refraction method was established as a tool in applied geophysics. In the early days, the method was used for oil exploration and for detection of hidden salt domes. At the beginning of the thirties the refraction technique was applied to Civil engineering problems. In 1941, the first seismic refraction investigation was carried out in Sweden to see depth of bedrock for hydroelectric power plant initiating extensive use of the method elsewhere for Civil engineering and to a lesser extent for water prospecting and mining. Application of the seismic refraction method increased considerably from the beginning of the fifties, owing to refinements in the interpretation techniques.

The following is a know-how information, generally obtained by this investigation:

- Thickness of the overburden layers overlying compact bedrock
- Thickness of fractures and weathered rock materials

- Indication of fault zone
- Depth of water table
- Elastic coefficients of rock, such as Bulk's Modulus, Young's Modulus, Poisson's ratio and Shear Modulus

In the Seismic Refraction Method, elastic waves are generated by an explosive charge and/or impact of a falling weight. The waves, generated are longitudinal (P) transverse (S) and Surface waves. P-waves are faster and more easily recorded. Therefore P-waves are used almost exclusively to estimate thickness. Although a number of variations of the Seismic refraction method may be used, all are based on the recording of the first arrival travel times of the seismic waves over a range of distance between source and receiving positions. This method is particularly valuable for prefeasibility study in area where there is at least one high speed marker bed overlain by lower speed formations. Refraction surveys on the other hand, yield data on Seismic velocities of the various formation as well as their geometry and of-

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\* Geophysicist, Department of Mines and Geology, Lainchaur, Kathmandu, Nepal.



ten make it possible to identify formations.

The precisions obtained on results using the Seismic method is generally stated as follows:

- Computed refractor depth should be accurate to 1 meter for depths less than 10 meters
- Computed refractor depths greater than 10 meters should be accurate to within 10% of the actual depth of the refractors.

The aim of the Seismic refraction investigation for hydroelectric project is to measure with a relatively good accuracy the soil and rock physical properties with the following advantages:

- The method is rapid, so various alternative solution to a project can be evaluated at the very beginning of the investigation programme. Thus investigation programme can be better oriented
- Large area of a project site is covered at reasonable cost
- Seismic refraction, preceding the drilling programme, reduces the number of drill holes, and helps the correlation between them, the drill hole log is used on the other hand to calibrate and verify the

accuracy of the seismic refraction profile.

In Nepal, the Seismic refraction investigation was applied as a important tool in the stage of prefeasibility and feasibility study of hydroelectric power projects since 1974. Seismic refraction method had been used in different Hydroelectric projects such as Kulckhani, Karnali-Chisapani, Marayangdi, Tama Kosi-3, Sun Kosi-2, Sun Kosi-3, West Soti, Saptu Gandaki etc. by various foreign companies.

In Buri Gandaki, Kali Gandaki-2 and Arun-3 Hydroelectric Projects Seismic refraction method use applied by the Investigation Unit of the Department of Electricity with assistance of CIDA. Recently, the Electricity Department, Investigation Unit, started to conduct the seismic survey, using the ABEM-Terraloc Computerized seismograph provided by Canadian Govt.

In conclusion one can say that the seismic refraction is taking an important part of the investigation programme for hydroelectric projects in all phases from reconnaissance to engineering design. It has already saved a tremendous amount of time and cost of studies for numbers of projects and has become a mandatory investigation tool of production oriented engineers.

## Participation in Training Programme

Nepal Geological Society congratulates the following members who have completed Diploma, training research courses recently in various countries, and wishes further successes in their chosen life.

<u>Name</u>	<u>Subject</u>	<u>Country</u>
1. Adhikari, T. P.	Photogeology	The Netherlands
2. Pradhanang, U. B.	Structure Geology	India
3. Sharma R. R.	" "	"
4. Sharma, T.	J.S.P.S. Research fellow on Petroclumistry	Japan
5. Tamrakar, S.	Exploration Geochemistry	The Netherlands
6. Upreti, B. N.	Engineering Geology	Japan

## Participation in Seminar/conference/work shop

Following members of NGS have participated in Seminar/conferences/work shop.

<u>Name</u>	<u>Topic</u>	<u>Country</u>
1. Bhattarai, K. D	- Remotesensing	China
	- Remotesensing	Indonesia
	- ICC Meeting on Remote Sensing	"
	- COSPAR, Meeting	Austria
	- IGC,	USSR
	- Remotesensing	West Berlin
2. Joshi, P. R.	Tin and Tungsten	Thailand
3. Kaphle, K. P.	ESC in Indian Ocean	Sri Lanka
4. Kayastha, N. B.	Geology of SE Asia	Singapur
5. Poudel, K. R	Economic Geology	Japan
6. Tater, J. M.	Tin and Tungsten	Thailand



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## Best Wishes

Following members of NGS have left recently for further research/degree/diploma/training course abroad. NGS wishes them success in their chosen field of study:

<u>Name</u>	<u>Subject</u>	<u>Country</u>
1. Adhikari, P.	Quaternary Geology	Belgium
2. Bajracharya, R. B	Geophysical Methods	India
3. Dangol, G. M	Sedimentology	Canada
4. Gautam, P.	Exploration Geology	Thailand
5. Pradhanang, U. B	Photogeology	The Netherlands
6. Sakya R. R	Photogeology	"
7. Sharma M. P.	Petrology & Geochemistry	Japan
8. Sharma R. R.	Petroleum Management	U. S. A

## List of Members of NGS

NGS is proud to publish the new complete list of its life members, members and associated members. Serial number corresponds to the registration number of our members according to dates of entry. Code letters denotes type of membership.

LM - Life member

M - Member

AM - Associated member

<u>Code</u> <u>Letter</u>	<u>Sr.</u> <u>Ne.</u>		
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LM	3.	R. K. Aryal	: -do-
M	4.	R. R. Sharma	: -do-
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LM	7.	N. B. Kayastha	: -do-



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### Note:

Members are requested to quote their registration number when corresponding with NGS. In near future NGS is going to provide member ship-card for each member. As we do not have address of some of our members, who have not filled their member ship forms completly, we request them to fill the forms as soon as possible.

## ०४१।४२ आर्थिक वर्षको साधारण सभामा सचिवबाट प्रस्तुत प्रतिवेदन

नेपाल भौगोलिक समाजको ०४१।४२ आर्थिक वर्षको साधारण सभामा यहाँ उपस्थित सबै सदस्य साबीहृदलाई म हार्दिक स्वागत गर्दछु । यहाँहरू समक्ष गत साल हाम्रो समाजले गरेको विभिन्न गतिविधि वारे छोटो प्रतिवेदन पेश गर्न पाउँदा मलाई खुशी लागेको छ । आज हाम्रो समाज छैठौँ वर्ष पुरा गरी सतौँ वर्षमा प्रवेश गर्दछ । यो अवधि लामो देखिएता पनि समाजको उत्थति र क्रिया-कलापको लागि छोटो नै हो भन्नेमा अतिथुक्ति नहोला । मलाई लाग्छ सिमित साधन तथा केही सदस्य साबीहृदबाट शुरू भएको यो हाम्रो समाजले विगत वर्षमा जे जति गर्न सक्यो र गर्दछ त्यो पनि कम होइन ।

यस अनुरूप गत साल सबै सम्मतीबाट आएको पक्ष कार्यकारिणीले वितेका वर्षमा समाजको विकास तथा यसलाई क्रियासिल बनाउनमा विभिन्न कार्यहरू गरेको थियो । यि मध्ये समाजको प्रशासकिय कार्यमा सुधार, सदस्यहरूलाई रजिष्ट्रेशन प्रदान गर्ने कार्य, जर्नल तथा न्यूज बुलेटिनको दर्ता र सो को प्रकाशन, छात्रवृत्तिको व्यवस्था, कोलीकूयममा सहभागिता, भूगर्भ सम्बन्धी प्रबचन, तथा नयाँ सदस्यता सम्बन्धि कार्यहरू उल्लेखनिय छन् ।

प्रशासकिय कार्य सुधार तर्फ, समाज स्थापना भएको थितिका वर्ष पुगि सक्दा पनि समाजले समय समयमा गरेको प्रशासकिय कार्यहरूको राम्रो लगत नरहेको हुँदा सो को कठिनाई महशुस गरी गत वर्ष देखिनै समाजका नाउँमा आउने सम्पूर्ण पत्र पत्रिका आदीको विधिवत दर्ता, एवं बाहिर जाने पत्रमा चलानी नम्बर राखी पठाउने कार्य गरी, लगत राख्ने कार्यको थालनी गरियो ।

यसरी नै सबै सदस्यहरूको नामावसी व्यवस्थित गर्ने उद्देश्यले नयाँ पूर्ण लिष्ट तयार गरी, हरेक सदस्यलाई प्रवेश मितिको गणना अनुसार रजिष्ट्रेशन प्रदान गरिएको छ र सो लिष्ट आउदो बुलेटीनमा प्रकाशित गरिने छ । समय - समयमा समाजबाट प्रकाशनमा ल्याईने जर्नल अफ द नेपाल जीयोसजिकल सोसाईटी तथा न्यूज बुलेटिनको दर्ता एउटा जटिल समस्याको रूपमा रहेको थियो, जस्तै गर्दा पत्रिका प्रकाशनमा नै विभिन्न व्यवस्थापकिय अवरोध ल्याएको थियो । यस वर्ष सो समस्या समाधान भई हाम्रो जर्नल तथा बुलेटीनलाई वैधानिक मान्यता दिई काठमाडौँ जिल्ला कार्यालयले दर्ता प्रदान गर्‍यो । यसरी प्राप्त जर्नल तथा बुलेटीनको दर्ता नम्बर १।०४२-



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४३ रहेको छ। यस कार्यमा कति पनि किनो नमान्ने सक्रिय सहयोग दिने सदस्य साथी श्री कृष्ण प्रसाद काफ्लेज्यूलाई धन्यवाद दिन चाहन्छु।

जर्नल तथा न्यूज बुलेटिनको प्रकाशन पनि नियमित हुन सकेको छैन। जर्नल तथा बुलेटिन यथासम्भव नियमित रूपले प्रकाशन गर्दै जाने लक्ष राखी धेरै समय अघि प्रकाशनमा ल्याउनु पर्ने जर्नल तथा बुलेटिन Vol 2 No. 2 प्रकाशनमा ल्याइयो।

हाल समाज यसै जर्नलको Vol 3, को नं. १ र २, संयुक्त रूपले प्रकाशनमा ल्याउने तरम्बरमा छ। पुराना अंकहरू प्रकाशन हुन नसकि पछाडी परेकोले यस वर्ष दुई अंकहरू नम्बर १ र २ संयुक्त रूपमा प्रकाशनमा ल्याउनु परेको हो।

यसरी जर्नल प्रकाशनको कार्यलाई प्राथमिकता दिइता पनि अब प्रकाशनमा ल्याउनु पर्ने Jo, Vol. 4, अंकहरूको लागि पर्याप्त पेपरहरू भएभएकोले पत्रिका प्रकाशनमा अबरोध आउने स्थिति रहेको जानकारी सदस्य साथीहरूलाई अवगत गराउन चाहन्छु। तसर्थ, भ यहाँ उपस्थिति हुनु भएका सर्वे सदस्य साथीहरूलाई आफुले गरेको वैज्ञानिक अन्वेषण सम्बन्धी लेख पढाई जर्नलको, प्रकाशनमा सघाउ पुर्‍याउनका साथै यि प्रकाशित कृतिबाट नेपाली भूगर्भ विदहरूको प्रतिभा बाहिरी जगतमा पनि समाजले चिनाउने मौका पाउने थियो।

यस वर्ष पहिलो पटक समाजले आफ्नो सक्रियतामा पेशागत विकासमा मद्दत पुर्‍याउने उद्देश्यले, राजकीय विज्ञान तथा प्रविधि प्रतिष्ठान तथा आई० जी० सी० पी० राष्ट्रिय समिति मार्फत केही छात्रवृत्तिको व्यवस्था गरी समाजका सदस्य साथीहरूलाई विदेशमा अध्ययन गर्ने व्यवस्था मिलाएको थियो जस अनुरूप आई० जी० सी० पी० राष्ट्रिय समितिबाट प्राप्त भारतको देहारादूनमा संचालन गरिएको स्टुडन्टल जियोलाजि सम्बन्धी छ हप्ते कोर्समा समाजको सदस्यसाथी श्री ऋषिराम शर्माले भाग लिनु भएको थियो। यसरी नै राष्ट्रिय विज्ञान तथा प्रविधि प्रतिष्ठानबाट प्राप्त 8th रिजनल ट्रेनिङ्ग कोर्स ईन एक्स्प्लोरेसन जियोफिजिक्स विषयककोर्समा समाजका सदस्य साथी श्री वासुदेव खरेलज्यूलाई मनोनयन गरेकोमा केही कारण बस बढाउने उक्त ट्रेनिङ्गमा भाग लिन सक्नु भएन।

हाल फेरी आई० जी० सी० पी० राष्ट्रिय समितिबाट प्राप्त भारतको हंदरावादमा नै संचालन हुन लागेको नाइन्थ रिजनल ट्रेनिङ्ग कोर्स इन् एक्स्प्लोरेसन जियोफिजिक्स कोर्समा समाजका सदस्य साथी श्री राजा भाई बजाचायंलाई मनोनयन गरिएको छ। यसरी भूगर्भ विदहरूको पेशागत शिक्षा बढाउने कार्यमा यस समाजलाई सशक्त सहयोग गरी दिएकोमा भ नेपाल राजकीय विज्ञान तथा प्रविधि प्रज्ञा प्रतिष्ठान तथा नेपाल आई० जी० सी० पी० राष्ट्रिय समितिलाई धन्यवाद दिन चाहन्छु। यसरी नै अबिध्यमा पनि यस समाजले उक्त निकायहरूसँग यस्तै किसिमको सहयोगको अपेक्षा राख्दछ।



जापानी विशेषज्ञ तथा आई० जी० सी० पी० राष्ट्रिय समितिको संयुक्त तत्वाधानमा संचालन गरिएको कोलुक्कुलममा नेपाल भौगमिक समाजलाई पनि संलग्न गराइएको थियो । आई० जी० सी० पी० राष्ट्रिय समितिको स्तरमा उक्त प्रोसिडिङको एउटा पेपर निकाल्ने उद्देश्य राखी नेपाल भौगमिक समाजका सम्पूर्ण सम्पादन मण्डलको उक्त कोलुक्कुलममा सहभागिता रहेको थियो ।

सोहि कोलुक्कुलममा भागलिन आउनु भएका कुमाउ विश्व विद्यालयको प्रो. श्री के. एस. बाल्डीयया वाट जियोलाञ्जि अफ दि कुमाउहिमालय विषयमा समाजले एउटा प्रवचन गराइएको थियो ।

### नयाँ सदस्यता:

यस वर्ष नयाँ ११ जनालाई आजीवन सदस्यता प्रदान गरी आजीवन सदस्यको संख्या ३१ बाट बढाई ४२ पुऱ्याइयो भन्ने १ जनालाई नयाँ साधारण सदस्यता प्रदान पनि गरयो । यसरी हाल समाजको कुल सदस्य संख्या १३५ रहन गएको छ । यसरी नै सह - सदस्यको संख्या पनि ५ जना थियो भन्ने हाल सो संख्या ९ पुग्न गएको छ । समाजका ४२ जवान आजीवन सदस्य मध्ये ३७ जवान आजीवन सदस्यहरूको सदस्यता मुलक वापत हुन आउने रकम रु. १५,५००।- किम्स डिपोजिटमा राखियो र यस बाट आउने व्याज सोसाइटीको आमदानी भतिनेछ ।

सदस्यसाथीहरू विच आफ्नै भेटघाट मनोरंजन तथा विचारको आदान प्रदान होस भन्ने

हेतुले एउटा पिकनिकको पनि आयोजना गरिएको थियो ।

यसरी, समाजले १ वर्ष भित्र सम्पन्न गरेको विभिन्न क्रिया कलापको मोटामोटी जानकारी सदस्यसाथीहरूलाई गराए र यसरी नै भविष्यमा पनि यस कार्य कारिणीले यस्तै किसिमको क्रिया-कलाप गर्दै लैजानेको साथै निम्न कुराहरू पनि गर्ने लक्ष राखेको छ ।

### लक्षहरू:

- क) जनल तथा न्यूज बुलेटीनको प्रकाशन नियमित गराउदै लैजाने ।
- ख) भविष्यमा यस कार्यकारिणीले समाजका सदस्य साथीहरू विच एउटा नेशनल सेभलमा टक । सेमिनारको आयोजना गर्ने कार्यक्रम राखेको छ ।
- ग) सर्व सदस्य साथीलाई हाल समाजले प्रदान गर्न लागेको रजिष्ट्रेशन नम्बर ईकित भएको एउटा परिचय पत्र प्रदान गर्ने छ । र समयमै समाजले फाउण्डर मेम्बरहरूको सिष्ट पाएको छण्डमा, फाउण्डर मेम्बर भन्ने कुरो पनि त्यसमा ईकित गर्ने कोशिस हुने छ ।
- घ) समाजको उद्देश्य पुतिगर्न विभिन्न वैज्ञानिक निकायहरू, जस्तै नेपाल राजकीय विज्ञान तथा प्रविधि प्रज्ञा प्रतिष्ठान, आई० जी०

सी० प्री० राष्ट्रिय समिति तथा राष्ट्रिय विज्ञान तथा प्रविधि परिषदसंग निकट सम्बन्ध राखी समाजको हितमा काम गर्दै जाने लक्ष राखेको छ ।

### समस्याहरू:

- क) आजीवन सदस्यको सदस्यता शुल्क रु. ५००।- राखिएकोमा हालको मुद्रा अबमूल्यन आदिले गर्दा यसलाई रु. ५००।- बाट कम्तिमा पनि रु. ७५०।- गर्नु पर्ने छान्दछु ।
- ख) यसरी नै समाजबाट प्रकाशनमा ल्याईने जनतलहरूको प्रकाशनमा हालको कागजको मूल्य बृद्धि, छपाई खर्चमा बृद्धि आदीले गर्दा- समाजलाई यि जनतल प्रकाशनमा निकै आर्थिक व्ययभार सहनु परेको छ । तसर्थ अब आउने जनतलको हरेक अंकको मूल्य रु. १०।- बाट

बढाई कम्तिमा रु. १५।- गर्ने सिफारिस गर्दछु ।

- ग) हालै मात्र कार्यकारिणी सदस्य श्री उपेन्द्र प्रधानाङ्ग ज्यू उच्च शिक्षा अध्ययनार्थ विदेशमा जानु भएकोले यसरी रिक्त हुन आएको वहाँको पदमा एकजना सदस्यको मनोनयन गर्नु पर्ने देखिन्छ ।

- घ) मिति २०४२।२।२० मा समाजका एक जना सदस्यले विद्यमान जियोलजि समूहमा पनि इस्पेक्ताइजेशन अनुसार विभिन्न उप-समूहहरूको आवश्यकता दर्शाई समाजलाई एउटा चिट्ठी दिनु भएकोमा, सो वारे पनि जनरल मिटिङ्गमा सर्वको रायको आश्वासनमा के कारवाही गर्ने ? भन्ने निधोको लागि यो समस्या छलफलको लागि समाजका सदस्यसाथीहरू विच पेश गरेको छु ।

### छलफल:

समाजका सचिव र कोषाध्यक्षको प्रति वेदन पछि उठाइएका समस्याहरू वारे छलफल हुँदा सबै सदस्य साथीहरूले सक्रियतापूर्वक भाग लिइ आफ्नो मन्तव्य व्यक्त गर्नुभयो ।

- १) आजीवन सदस्यता शुल्क रु. ५००।- बाट ७५०।- गर्ने प्रस्तावमा छलफल हुँदा डा० श्री चन्द्रकान्त शर्माले शुल्क बृद्धि गर्न हुदैन भन्नु भयो भने श्री बामुदेव खरेलले शुल्क

बढाउन अघि कम्तिमा एक महिना पहिले सबै सदस्य साथीहरूलाई अवगत गराउनु पर्ने धियो भन्नु भयो । श्री रामनगीना यादवले के कामको लागि बढाउने भनि प्रश्न गर्नु भयो र यसै सन्दर्भमा श्री कामोदमणि दिधीतले बढाउनु अघि बिस्तृत आर्थिक बिश्लेषण हुनु पर्ने कुरा औल्याउनु भयो । अन्तमा डा० श्री चन्द्रकान्त शर्माको सुझावमा



श्री आमोदमणी दिक्षित सहित एक समिती  
गठन गरी यसबारे अध्ययन गर्ने निर्णय भयो ।

२) डा० श्री चन्द्रकान्त शर्माले समाजको कार्य-  
कलाप बारे सबै सदस्यहरूलाई जानकारी  
गराउन भूगर्भविदहरू कार्यरत सबै संस्थान-  
हरूमा सम्पर्क बिन्दु स्थापना गर्नु पर्ने  
आवश्यकता औल्याउनु भयो, जस्मा सबै-  
सम्मतिबाट त्यसतर्फ कारवाही गर्ने निर्णय  
भयो ।

३) डा० श्री विशालनाथ उप्रेतिले पत्रिका शुल्क  
सदस्यता शुल्कमा समावेश गर्ने सुझाव राख्नु  
भएकोमा सो नगर्ने निर्णय भयो ।

४) श्री गोपालसिंह थापाले प्रकाशित जनलको  
कृति प्रति विक्री भयो भन्ने प्रश्न गर्नु भयो ।

५) डा० श्री चन्द्र कान्त शर्माले राख्नु भएको  
साधारण सदस्यता शुल्क बढाउने प्रस्तावमा  
श्री तारा प्रसाद अधिकारीले शुल्क बढाउन  
न्यबहारीकता भएन भन्दै त्यसको बदला  
सदस्यता शुल्कको बाँकि रकम छिटो उठा-  
उने तर्फ कारवाही गर्नु पर्छ भन्नु भयो ।

अन्तमा सदस्यता शुल्क यथावत राख्ने निर्णय  
भयो ।

६) जनलको मुल्य वृद्धि गर्ने प्रस्तावमा छलफल  
हुँदा सर्वसम्मतिबाट जनल शुल्क बढाई  
रु १५१ गर्ने निर्णय भयो ।

७) श्री तारा प्रसाद अधिकारीले श्री ५ को  
सरकारको जियोसजि समुहमा स्पेसियालाई  
जेसन गरि उप समुह विभाजन गर्ने तर्फ  
समाजले बिचार गर्नु पर्छ भन्ने प्रस्तावमा  
छलफल हुँदा यमस्था बारे सबै साथीहरू  
संग बिस्तृत छलफल गरी का. का. स. लाई  
सुझाव पेश गर्ने श्री तारा प्रसाद अधिकारी  
समेत भएको एक समिति गठन गर्ने निर्णय  
भयो ।

८) डा० श्री चन्द्र कान्त शर्माको साधारण  
सभा सत्रै खानी तथा भूगर्भ विभाग को  
सभा कक्षमा मात्र किन गर्ने भनी प्रश्न गर्दा  
सो प्रश्नको विचार सबै सदस्य साथीहर  
बाट हुँदा अब आउँदो साधारण सभा सक-  
भर अन्य ठाउँमा गर्ने निर्णय भयो ।

**Best Compliments**

*to*

**Nepal Geological Society**

*From*

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